

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

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Sheet

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of

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Application Number	To be assigned
Filing Date	July 31, 2003
First Named Inventor	Hilda E. Smith
Group Art Unit	To be assigned <u>1645</u>
Examiner Name	To be assigned <u>J. Hines</u>

Attorney Docket Number 2183-6055US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ³ (if known)			
		US-5,610,011	03/11/1997	Smith et al.	
		US-5,681,570	10/28/1997	Yang et al.	
		US-5,733,765	03/31/1998	Mollet et al.	
		US-5,786,184	07/28/1998	Mollet et al.	
		US-5,928,900	07/27/1999	Masure et al.	
		US-5,948,900	09/07/1999	Yother et al.	
		US-5,981,228	11/09/1999	Masure et al.	
		US-2002/0055168 A1	05-09-2002	Smith	
		US-			

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³ - Number ⁴ - Kind Code ³ (if known)			
		WO 92/16630	10-01-1992	Centraal Diergeneskundig Instituut	
		WO 96/21465	07-18-1996	Connaught Laboratories Limited	
		WO 95/06732	03-09-1995	Rockefeller University	
		WO 95/31548	11-23-1995	UAB Research Foundation	
		EP 0 750 043 B1	12-27-1996	Societe Des Produits Nestle	No translation
		WO 02/038397 A2	05-16-2002	IL-Lelystad, Instituut Voor Dierhouderijen Diergezondheid B.V.	
		WO 00/05378	02-03-2000	Stichting Dienst Landbouwkundig Onderzoek	
		WO 02/061070 A2	08-08-2002	IL-Lelystad, Instituut Voor Dierhouderijen Diergezondheid B.V.	

Examiner Signature		Date Considered	10/04
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT							
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Sheet	2	of				3	
						Application Number	To be assigned
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First Named Inventor Hilda E. Smith

Group Art Unit To be assigned 1645

Examiner Name To be assigned J. Hines

Attorney Docket Number 2183-6055US

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
<i>JP</i>		ALLGAIER et al., Relatedness of <i>Streptococcus suis</i> isolates of various serotypes and clinical backgrounds as evaluated by macrorestriction analysis and expression of potential virulence traits. <i>Journal of Clinical Microbiology</i> , 2001, pp. 445-453, Vol. 39, No. 2.		²
<i>JP</i>		BUSQUE et al., Immunization of pigs against <i>Streptococcus suis</i> serotype 2 infection using a live avirulent strain. <i>Can J Vet Res.</i> , October 1997, pp. 275-79, Vol. 61, No. 4.		
<i>J</i>		CHARLAND et al., <i>Streptococcus suis</i> serotype 2 mutants deficient in capsular expression. <i>Microbiology</i> , February 1998, pp. 325-32, Vol. 144, No. 2.		
<i>J</i>		DATABASE EMBL 'Online' McNab, <i>S. gordonii</i> partial <i>aldB</i> gene, <i>cshA</i> gene & <i>fbpA</i> gene, Database accession No. X65164, XP02213089.		
<i>J</i>		DE GREEFF et al., Contribution of Fibronectin-Binding Protein to Pathogenesis of <i>Streptococcus suis</i> Serotype 2. <i>Infection and Immunity</i> , Mar. 2002, pp. 1319-25, Vol. 70, No. 3.		
<i>J</i>		DE GREEFF et al., Distribution of Environmentally Regulated Genes of <i>Streptococcus suis</i> Serotype 2 among <i>S. suis</i> Serotypes and Other Organisms. <i>Journal of Clinical Microbiology</i> , Sept. 2002, pp. 3261-68, Vol. 40, No. 9.		
<i>JP</i>		ELLIOTT et al., Streptococcal infection in young pigs. V. An immunogenic polysaccharide from <i>Streptococcus suis</i> type 2 with particular reference to vaccination against streptococcal meningitis in pigs. <i>October 1980</i> , pp. 275-85, Vol. 85, No. 2.		
		KAWABATA et al., Molecular cloning, sequence and characterization of a novel streptococcal phosphoglycerate dehydrogenase gene. <i>Oral Microbiology and Immunology</i> , 2000, pp. 58-62, Vol. 15.		
		KOLKMAN et al., Diversity of capsular polysaccharide synthesis gene clusters in <i>Streptococcus pneumoniae</i> . <i>J. Biochem.</i> , May 1998, pp. 937-45, Vol. 123, No. 5.		
		KOSKIJNIEMI et al., Identification of two genes, <i>cpxX</i> and <i>cpxY</i> , with putative regulatory function on capsule expression in group B streptococci. <i>FEMS Immunology and Medical Microbiology</i> , 1998, pp. 159-68, Vol. 21.		
		McNAB, Cloning and sequence analysis of thymidine kinase from the oral bacterium <i>Streptococcus gordonii</i> . <i>FEMS Microbiology Letters</i> , 1996, pp. 103-110, Vol. 135.		
		MUNOZ et al., Characterization of IS1515, a Functional Insertion Sequence in <i>Streptococcus pneumoniae</i> . <i>Journal of Bacteriology</i> , Mar. 1998, pp. 1381-88, Vol. 180, No. 6.		
<i>J</i>		QUESSY et al., Immunization of mice against <i>Streptococcus suis</i> serotype 2 infections using a live avirulent strain. <i>Can J. Vet Res.</i> , October 1994, pp. 299-301, Vol. 58, No. 4.		

Examiner Signature	<i>JP</i>	Date Considered	10/04
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	To be assigned
(use as many sheets as necessary)				Filing Date	July 31, 2003
Sheet	3	of	3	First Named Inventor	Hilda E. Smith
				Group Art Unit	To be assigned 1645
				Examiner Name	To be assigned J. Hines
				Attorney Docket Number	2183-6055US

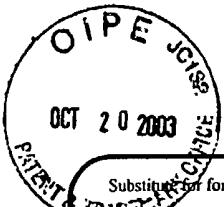
OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
<i>GD</i>		PCT International Search Report, PCT/NL02/00073, dated February 5, 2003.		
		PCT International Preliminary Examination Report, PCT/NL02/00073, dated May 7, 2003.		
		SEGERS et al., Characterisation of the gene encoding suislysin from <i>Streptococcus suis</i> and expression in field strains, FEMS Microbiology Letters, 1998, pp. 255-61, Vol. 167.		
		SMITH et al., Environmentally regulated genes of <i>Streptococcus suis</i> : identification by the use of iron-restricted conditions in vitro and by experimental infections of piglets, Microbiology, 2001, pp. 271-80, Vol. 147.		
		SMITH et al., Identification and characterization of the cps locus of <i>Streptococcus suis</i> serotype 2: the capsule protects against phagocytosis and is an important virulence factor, Infect Immun., April 1999, pp. 1750-56, Vol. 67, No. 4.		
		SMITH et al., Selection of virulence-associated determinants of <i>Streptococcus suis</i> serotype 2 by in vivo complementation, Infection and Immunity, March 2001, pp. 1961-66, Vol. 69, No. 3.		
		SMITH et al., Mutants of <i>Streptococcus suis</i> Types 1 and 2 Impaired in Expression of Muramidase-Released Protein and Extracellular Protein Induce Disease in Newborn Germfree Pigs, Infection and Immunity, Oct. 1996, pp. 4409-12, Vol. 64, No. 10.		

Examiner Signature	<i>GD</i>	Date Considered	10/04
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

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Complete if Known

Application Number	10/632,117
Filing Date	July 31, 2003
First Named Inventor	Hilda E. Smith
Group Art Unit	To be assigned 1645
Examiner Name	To be assigned J. Hanes
Attorney Docket Number	2183-605511S

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	✓	ELLIOTT et al., Streptococcal infection in young pigs. V. An immunogenic polysaccharide from Streptococcus suis type 2 with particular reference to vaccination against streptococcal meningitis in pigs, October 1980, pp. 275-85, Vol. 85, No. 2.	
		ROBERTS et al., The biochemistry and genetics of capsular polysaccharide production in bacteria, Ann. Rev. Microbiol., 1996, pp. 285-315, Vol. 50.	
		SMITH et al., High efficiency transformation and gene inactivation in Streptococcus suis type 2, Microbiology, January 1995, pp. 181-88, Vol. 141.	
		SMITH et al., Cloning and nucleotide sequence of the gene encoding the 136-kilodalton surface protein (muramidase-released protein) of Streptococcus suis type 2, Infection and Immunity, 1992, pp. 2361-67, Vol. 60, No. 6.	
		SMITH et al., Repeats in an extracellular protein of weakly pathogenic strains of Streptococcus suis type 2 are absent in pathogenic strains, Infection and Immunity, 1993, pp. 3318-26, Vol. 61, No. 8.	
		SMITH et al., The cps locus of Streptococcus suis serotype 2: genetic determinant for the synthesis of sialic acid, Microbial Pathogenesis, 2000, pp. 127-34, Vol. 29, No. 2.	
↓		WATSON et al., Pneumococcal Virulence Factors and Host Immune Responses to Them, European Journal of Clinical Microbiology & Infectious Diseases, June 1995, pp. 479-90, Vol. 14, No. 6.	

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